

### **AMENDMENTS TO THE CLAIMS**

This listing of claims will replace all prior versions, and listings of claims in the application:

#### **Listing of Claims:**

The invention claimed is:

1. (Currently amended) A method in a healthcare information technology system for providing ~~inferreding~~ genetic findings for a person, the method comprising:

receiving a request for genetic findings for a person;

in response to the request, determining if the person has actual genetic findings, and

if the person does not have actual genetic findings, automatically providing inferred genetic findings for the person to a user.

2. (Currently amended) The method of claim 1, wherein the step of determining if the person has ~~stored~~ actual genetic findings comprises searching ~~the~~ an electronic medical record for the person.

3. (Original) The method of claim 1, wherein the request is initiated by a decision support rule.

4. (Currently amended) The method of claim 1, further comprising:  
obtaining the traversal pattern for the actual genetic findings requested.

5. (Currently amended) The method of claim 4, further comprising:

inquiring whether at least one family member of the person within the traversal pattern has ~~the~~ actual genetic findings.

6. (Currently amended) The method of claim 5, further comprising:  
utilizing the actual genetic findings for the one or more family members to provide ~~an~~ inferred genetic findings for the person.

7. (Currently amended) The method of claim 6, wherein the actual genetic findings for the one or more family members are obtained from an electronic medical record for each family member stored within a comprehensive healthcare system.

8. (Original) The method claim 1, further comprising:  
obtaining cytogenetic observations for the person.

9. (Original) The method of claim 8, further comprising:  
utilizing the cytogenetic observations to provide the inferred genetic findings for the person.

10. (Original) The method of claim 1, further comprising:  
obtaining demographic information for the person.

11. (Original) The method of claim 10, further comprising:  
utilizing the demographic information for the person to provide the inferred genetic findings for the person.

12. (Original) The method of claim 1, further comprising:  
obtaining genetic marker information for the person.

13. (Original) The method of claim 12, further comprising:  
  
utilizing the genetic marker information for the person to provide inferred genetic findings for the person.
14. (Currently amended) The method of claim 1, wherein the system communicates the inferred genetic findings ~~results~~ to a user.
15. (Currently amended) The method of claim 12, further comprising:  
  
obtaining the traversal pattern for the actual genetic findings requested;  
  
and  
  
inquiring whether at least one family member of the person within the traversal pattern has ~~the~~actual genetic findings and any genetic markers.
16. (Currently amended) The method of claim 15, further comprising:  
  
utilizing ~~the~~ genetic marker information for the person, the actual genetic findings for the one or more family members and the genetic markers for the one or more family members to provide inferred genetic findings for the person.
17. (Currently amended) A method in a computer system for providing ~~inferreding~~ genetic findings for a person, the method comprising:  
  
receiving a request for actual genetic findings for one or more genes for a person;  
  
determining if the person has actual ~~stored~~ genetic findings, and  
  
if the person does not ~~stored~~actual genetic findings, automatically providing inferred genetic findings for the person to a user.

18. (Currently amended) The method of claim 17, wherein the step of determining if the person has stored genetic findings comprises searching an ~~the~~ electronic medical record for the person.

19. (Original) The method of claim 17, wherein the request for actual genetic findings is from a user.

20. (Currently amended) The method of claim 17, further comprising:  
obtaining the traversal pattern for the actual genetic findings requested.

21. (Currently amended) The method of claim 20, further comprising:  
inquiring whether at least one family member of the person within the traversal pattern has actual ~~the~~ genetic findings.

22. (Currently amended) The method of claim 21, further comprising:  
utilizing the actual genetic findings for the one or more family members to provide ~~an~~ inferred genetic findings for the person.

23. (Currently amended) The method of claim 22, wherein the actual genetic findings for the one or more family members are obtained from an electronic medical record for each family member stored within a comprehensive healthcare system.

24. (Original) The method claim 17, further comprising:  
obtaining cytogenetic observations for the person.

25. (Original) The method of claim 24, further comprising:

utilizing the cytogenetic observations to provide the inferred genetic findings for the person.

26. (Original) The method of claim 17, further comprising:  
obtaining demographic information for the person.

27. (Original) The method of claim 26, further comprising:  
utilizing the demographic information for the person to provide the inferred genetic findings for the person.

28. (Original) The method of claim 17, further comprising:  
obtaining genetic marker information for the person.

29. (Original) The method of claim 28, further comprising:  
utilizing the genetic marker information for the person to provide inferred genetic findings for the person.

30. (Currently amended) The method of claim 28, further comprising:  
obtaining the traversal pattern for the actual genetic findings requested and  
inquiring whether at least one family member of the person within the traversal pattern has actual ~~the~~ genetic findings and genetic markers.

31. (Currently amended) The method of claim 30, further comprising:  
utilizing ~~the~~ genetic marker information for the person, the actual genetic findings for the one or more family members and the genetic markers for the one or more family members to provide inferred genetic findings for the person.